<u>Traffic Signal Design</u> Submission Requirements

1. Conceptual Design Report

Preparation of a Conceptual Design Report utilizing BTD approved traffic engineering analysis techniques to develop a conceptual design plan depicting proposed roadway geometry, lane use, traffic signal phasing, and preliminary timings. The development of the conceptual design report and plan shall be done in concert with BTD's Traffic Signal Operations Design, and will be used as a justification report to proceed to the 25% design stage.

2. 25% Submission

Preparation of a plan depicting basic traffic signal strategy including traffic signal housing locations (w/ signal housing display chart), signs, pavement markings, and proposed traffic signal phasing diagram.

3. 75% Submission

- a. A written response to all comments made at the 25% design stage.
- b. Complete traffic signal strategy plans including traffic signal equipment locations, signs, pavement markings, traffic signal phasing and timing chart, phasing diagram, loop detector chart, general notes, and a major list of items required.
- c. Refined traffic signal timing calculations including calculations of cycle lengths, green splits, and offsets for AM peak, PM peak and off peak hours.
- d. Refined time-space diagrams for interconnected signals.
- e. Traffic management plans.
- f. Draft special provisions.
- g. Preliminary estimates.

4. 100% Submission

- a. A written response to all comments made at the 75% design stage.
- b. Traffic signal plans incorporating all changes as directed from the 75% design stage review.
- c. Special provisions incorporating all changes as directed from the 75% design stage review.

5. PS&E Submission

- a. Stamped and signed approved plans, specifications and final estimate.
- b. Three hard copy sets of final plans and specifications are required as well as an electronic copy on CD ROM. Plans shall be drawn in AutoCad format. Specifications shall be in MS Word format.

Approved:
John DeBenedictis, P.E.
Director of Traffic Management & Engineering

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